

केन्द्रीय महर विभाग 2

हमारा संदर्भ: सीएमडी 2/16: 2074

21 04 2016

विषय : संशोधन संख्या 01 आई एस 2074:2015 (भाग-1) वायु शुष्क, लाल ऑक्सइड - जस्ता क्रोम, प्राइमिंग, के लिए तैयार मिश्रित रंग रोगन - विशिष्ट के लिए दिशा-निर्देश

आई एस 2074:2015 (भाग-1) की संशोधन संख्या 01 को लागू करने के लिए कार्यान्वयन दिशा-निर्देश और संशोधित एस टी आई Doc: STI/2074/6 March 2016 संलग्न हैं जो कि सक्षम प्राधिकारी द्वारा अनुमोदन किया गया है।

सभी सम्बन्धित पक्षकारों से अनुरोध है कि समयवधि अनुसार कार्यवाही करें।

(एस. बासू)
वैज्ञानिक ईं

प्रमुख (सीएमडी 2)

सभी क्षेत्रीय/शाखा कार्यालयों को परिचालित

प्रतिलिपि : आई टी एस को बीआईएस वेबसाइट/इंट्रानेट पर अपलोड करने के लिए

CENTRAL MARKS DEPARTMENT -2

Ref: CMD-2/16:2074

21 04 2016

Subject: Guidelines for Implementation of Amendment No. 1 to IS 2074:2015

Please find enclosed herewith guidelines for implementation of Amendment 1 to IS 2074:2015 and revised Scheme of Testing and Inspection Doc: STI/2074/6 March 2016 Ready Mixed Paint, Air Drying, Red Oxide – Zinc Chrome Priming duly approved by CA.

All stakeholders are requested for time-bound implementation.

(S. Basu)
Sc. E

Head CMD-2
Circulated to All RO/BO

Copy to: ITS for hosting on BIS Website/Intranet

CENTRAL MARKS DEPARTMENT-2

Our Ref.:CMD-2/16:2074

12 04 2016

Subject : Implementation of Revised STI for Ready Mixed Paint, Air Drying, Red Oxide – Zinc Chrome Priming according to IS 2074:2015 along with Amendment no1.

IS 2074:1992 was revised as IS 2074 (Part 1):2015 at the time of its 3rd revision. The revised standard IS 2074 (Part 1):2015 was established through Gazette notification dated 21-10-2015 with concurrent operation upto 21 January 2016, after which the old version shall stand cancelled. Amendment No 1 of Feb 2016 has been issued to undo the splitting of the standard in two parts.

The major changes effected in the 3rd revision read with Amendment No 1 include:

1. Test method for Non-volatile Vehicle has been prescribed.
2. A stricter maximum limit for Lead content, has been prescribed.
3. Test method and criteria for conformity for following tests have been modified:
 - a. Resistance to Sea Water Test.
 - b. Accelerated Storage Stability Test.

The STI has therefore been revised as Doc:STI/2074/6 of March 2016 (enclosed). The revised ISS (with Amendment No 1) and the revised STI are implemented with immediate effect; with concurrent operation upto **30 June 2016**. Following procedure may be adopted for implementing the revised IS, amendment no1 and the revised STI:

For Licensees:

- I. Revised STI shall be forwarded to all licensees and its acceptance shall be obtained on prescribed format.
- II. Licensees shall be advised to submit particulars of additional manufacturing and test facilities required as per the revised Standard on CM/PF 305 and CM/PF 306. They will also submit a Test Report (Factory or Independent) establishing conformity of their product to revised standard.
- III. Endorsement in the license for revised IS and STI shall be made after receiving acceptance of revised STI and availability of required Manufacturing and Test facilities. The scope of the license shall also be redefined depending on compliance to requirements of Defence and Marine application.
- IV. An early surveillance visit shall be arranged to verify additional test and manufacturing facilities as required and product conformity to revised standard, after receiving confirmation.
- V. Action shall be taken as per OMPC 2004, if the licensee fails to submit the acceptance of STI in stipulated time or required manufacturing and testing facilities are not available or failure of sample in factory / independent testing.

Applications:

- i. Applications where samples have not been drawn, shall be processed as per revised Standard, after taking an appropriate undertaking from the applicant.
- ii. Applications where samples are under Test as per old version, shall be processed in consultation with the applicant taking stock of the complete status.
- iii. For applications where Test report has been received without meeting requirements of the revised standard, grant of license may be processed immediately with an undertaking to implement the revision and provide BIS adequate time to verify the same, well before the end of concurrent operation i.e. before **30 June 2016**.

The guidelines are issued with approval of CA.

(S. Basu)
Sc.E

Head CMD-2

Circulated to RO/BOs

**SCHEME OF TESTING AND INSPECTION
FOR CERTIFICATION OF
READY MIXED PAINT, AIR DRYING, RED OXIDE –
ZINC CHROME, PRIMING
ACCORDING TO IS 2074:2015(*with Amendment 1*)**

1. **Laboratory** - A laboratory shall be maintained which shall be suitably equipped and staffed to carry out different tests in accordance with the methods given in the Indian Standard.
2. **Test Record** - All records of analysis and tests shall be kept in suitable forms approved by the Bureau of Indian Standards. Copies of any records that may be required by BIS shall be made available at any time on request.
- 2.1 **Quality Control** - It is recommended that, as far as possible, Statistical Quality Control (SQC) methods may be used for controlling the quality of the product as envisaged in this scheme [See IS 397 (Part 1) to 397 (Part 4)].
- 2.2 The measuring instruments/ test equipment are required to be brought under calibration control, as per frequency to be decided depending upon the usage.
3. **Standard Mark** -The Standard Mark(s) as given in Column (1) of the first Schedule of the licence shall be indelibly marked on each container and on the label applied to the container; provided always that the material in each container to which this mark is thus applied conforms to every requirement of the specification.
4. **Marking** - Following information shall be indelibly marked on each container.
 - a) Name of the material and indication whether undercoating or finishing,
 - b) Indication of the source of manufacture;
 - c) Lead content (Maximum);
 - d) Volume of the material;
 - e) Batch number or Lot number in code or otherwise;
 - f) Month and year of manufacture;
 - g) Details of and
 - h) A cautionary note as below:
 - i. Keep out of reach of children,
 - ii. Dried film of this paint may be harmful if eaten or chewed.
 - iii. This product may be harmful, if swallowed or inhaled.
5. **Levels of Control** - The tests, as indicated in Table 1 and at the levels of control specified therein, shall be carried out on the whole production of the factory which is covered by this scheme and appropriate records and charts maintained in accordance with paragraph 2 above. All the production which conforms to the Standard and covered by the licence shall be marked with Certification Mark of the Bureau.
- 5.1 For the purpose of this scheme the entire quantity of zinc Chrome primer produced in a batch mixer at a time shall constitute a control unit.

5.2 Conformity of a batch/ control unit to the requirements of the specification shall be decided on the basis of the testing of the samples drawn from the control unit:

- 5.2.1** A sample drawn from a control unit shall be tested for its colour by matching it with the specified IS colour. If it fails to conform to the specification, the control unit from which the sample is drawn shall be considered unfit for the purpose of marking.
- 5.2.2** In addition to the test as given in para 5.2.1 above, a sample taken from every control unit shall also be tested for its Volatile vehicle, Suitability for use, compatibility with thinner, objectionable impurities, lead content, consistency, viscosity, drying time, finish, Gloss, Fineness, Flexibility & adhesion, Flash point, volume solids and mass per ten litres. If any sample fails in respect of one or more of these requirements, the control unit represented by the sample shall be considered unfit for the purpose of marking.
- 5.2.3.** A sample from every fifth control unit shall be tested for its composition, in case of failure of any batch in composition every subsequent control unit shall be tested till subsequent two control units pass.
- 5.2.4** Every Tenth control unit shall be tested for protection against corrosion under conditions of condensation, resistance to sea water (applicable for marine paint only) resistance to salt spray, accelerated storage stability and Keeping Property. If tenth control unit fails in any one of the above requirements complete testing as stipulated in this scheme shall be carried out on all subsequent control units till five consecutive control units conform in all respects to the requirements of IS2074:2015, after which the testing on the tenth control unit shall be resumed.

6. Raw Material – Only such raw materials shall be used in the manufacture of the point which on testing are found to conform to relevant Standards indicated in Clause 5 of IS 2074: 2015. In case each consignment of raw material is covered by a test certificate further testing need not be done.

- 6.1** Each consignment of the thinner received in the factory shall be tested for flash point and records maintained and only those consignments conforming to the relevant Indian Standard specification shall be used.
- 7.** In respect of all other clauses of the specification, and at all stages of manufacture the factory shall maintain appropriate control and checks to ensure that their product conforms to the various requirements of the specification.
- 8. Rejection** – A separate record shall be maintained for material found not conforming to the specification and its method of disposal. Such material, if packed in containers, shall in no case be stored together with that conforming to the specification.
- 9. Sample** – The licensee shall supply, free of charge, the sample or samples required in accordance with the Bureau of Indian Standards (Certification) Regulation from his factory or godown. BIS shall pay for the samples taken by it from the open market.
- 10. Replacement** – Whenever a complaint is received, soon after the goods with the Standards Mark have been purchased and used, and if there is evidence that the goods

have not been misused; defective goods or their components shall be replaced or repaired free of cost by the licensee in case the complaint is proved to be genuine and the warranty period (where applicable) has not expired. The final authority to judge conformity of the product to the Indian Standard shall be with BIS. The firm should have its own complaint investigation systems as per IS/ISO 10002.

11. Stop Marking- The marking of the product shall be stopped under intimation to BIS, if at any time, there is some difficulty in maintaining the conformity of the product to the specification or the testing equipment goes out of order. The marking may be resumed as soon as the defects are removed under intimation to BIS.

The marking of the product shall be stopped immediately if directed to do so by BIS for any reason. The marking may be resumed only after permission by BIS. The information regarding resumption of marking shall also be sent to BIS.

12. Production Data – The licensee shall send to BIS as per the enclosed proforma to be authenticated by a Charted Accountant or by the manufacturer by giving an affidavit/undertaking, a statement of quantity produced, marked and exported by him and the trade value thereof at the end of each operative year of the licence.

IS 2074:2015
READY MIXED PAINT, AIR DRYING, RED OXIDE –
ZINC CHROME, PRIMING
TABLE 1 LEVELS OF CONTROL
(Cl.5 of Scheme of Testing and Inspection)

| Test Details | | | | Level of Control | | |
|---------------|--|-------------|--|------------------|----------------------------|--|
| Clause | Requirement | Test Method | | No. of Sample | Frequency | Remarks |
| | | Clause | Reference | | | |
| 5.1 | Composition | 5.1 | IS 2074:2015 | One | Fifth Control Unit | In case of failure of any batch in any of these requirements every subsequent control unit shall be tested till subsequent two control units pass. |
| | Non-volatile Vehicle content (Applicable in defence supply) | - | IS 101(Pt8/Sec2) | One | -do- | |
| 5.1.1 | (a) Zinc oxide content Chromic anhydride content | Annex B | -do- | One | -do- | |
| | (b) Red oxide (as Fe ₂ O ₃)% by mass | 6 | IS 6947(pt2) | One | -do- | |
| 5.1.2 | Volatile vehicle | 5.1.2 | IS 2074: 2015 | One | -do- | |
| 5.2 | Suitability for use with oleoresins synthetic and nitrocellulose based undercoats, surfaces, fillers and putty | 5.2 | IS 2074: 2015 | One | Every Control Unit | |
| 5.3 | Compatibility with Thinner | 5.3 | IS 2074:2015 | One | Every Control Unit | |
| 5.4 | Freedom from Objectionable Impurities | | -do- | One | Every Control Unit | |
| 5.5 | Lead Restriction | | IS 101(Pt 8/Sec 5) | One | Every Control Unit | |
| 5.6 & Table 1 | | | | | | |
| i) | (a) Consistency (b) Viscosity by ford cup no. 4 at 27± 2°C | Annex C | IS 2074:2015 IS 101(Part 1/Sec 5) | One -do- | Every Control Unit -do- | |
| ii) | Mass in kg /10 litre | | IS 101(Pt 1/Sec 7) | one | -do- | |
| iii) | Drying time, h, a) Surface dry b) Hard dry | | IS 101 (Pt3/Sec1) 1986 | One | Every Control Unit | |
| iv) | a) Finish b) gross 60 | | IS 101 (Pt.3/Sec 4) IS 101(Pt 4/Sec 4):88 | | -do- -do- | |
| v) | Fineness of grind, microns | | IS 101(Pt.3/Sec 5) | One | -do- | |

IS 2074:2015
READY MIXED PAINT, AIR DRYING, RED OXIDE –
ZINC CHROME, PRIMING
TABLE 1 LEVELS OF CONTROL
(Para 5 of Scheme of Testing and Inspection)

| Test Details | | | | Levels of Control | | |
|--------------|---|----------------------------|---|-------------------|---|---|
| Clause | Requirements | Test Method | | No. of Sample | Frequency | Remarks |
| | | Clause | Reference | | | |
| vi) | Colour | | IS 101(Pt 4/Sec 2):88 | One | Each Control Unit | |
| vii) | Flexibility and Adhesion: a) Bend test (with 6.25 mm dia mandrel and in type 1 apparatus) b) Scratch hardness (load 1000g) | Cl 2 Cl 3 | IS 101 (Pt.5/Sec 2) IS 101 (Pt 5/Sec 2) | One | -do- | |
| viii) | Flash point | | IS 101 (Pt 1/Sec6) | One | -do- | |
| ix) | Volume solids, percent, Min | | IS 101(Pt 8/Sec 6) | | -do- | |
| x) | Resistance to humidity : a) Resistance if humidity under condition of condensation b) Resistance to sea water. (applicable for marine paints only) c) Resistance to salt spray | Cl 2 Annex D Annex E | IS 101 (Pt6/Sec1) IS 2074:2015 IS 2074:2015 | One One One | Every 10 th Control unit Every 10 th Control unit Every 10 th Control unit | In case of failure of any batch in any of these requirements every subsequent control unit shall be tested till subsequent five control units pass. |
| xi) | Accelerated storage stability test | Annex F | IS 2074 :2015 | One | Every 10 th Control unit | |
| xii) | Keeping properties. | | IS 101(Pt6/Sec 2) | One | Every 10 th Control unit | |

APPENDIX I

PROFORMA FOR OBTAINING PRODUCTION DETAILS (Period to be covered by the Report being to)

Name of Licensee

CM/L No.

Name of Articles(s)

IS No.

Grade/type/Size/Variety/Class/ Rating

1.1 Brand/Trade/Name(s) of BIS Certification Marked Products :

2. Total production of the article(s) licensed for certification marking :

2.1 Total production of the article(s) conforming to Indian Standard :

3. Production covered with BIS Certification Mark and its approximate value

a) Quantity :

b) Value Rs. :

3.1 Brand Name used on production covered under BIS Certification Mark :

3.2 Calculation of marking fee on Unit-rate basis: Marking Fee per unit

a) Unit :

b) Quantity covered with BIS Certification Mark – :

*Information to be filled up by BO before forwarding to the licensee.

Note: In case a clause is not applicable, suitable remarks may be given against it.

c) Marking fee rounded off in whole rupees as obtained by

applying unit rates given in (a) on quantity given in (b)

4. Quantity not covered with BIS Certification Mark. If any,
and the reasons for such non-coverage

4.1 Brand Name under which non certified goods were sold

5. Quantity Exported with BIS Standard Mark and its value

5.1 Brand Name under which BIS Certified goods are exported

6. Authentication by Chartered Accountant